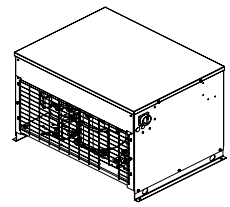
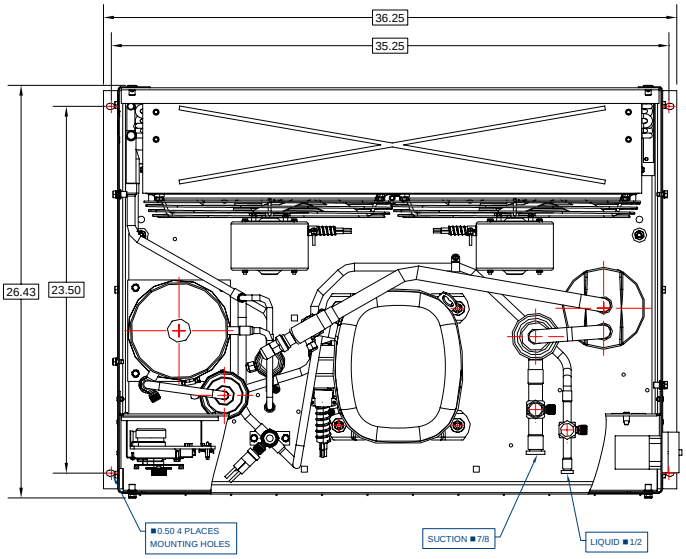
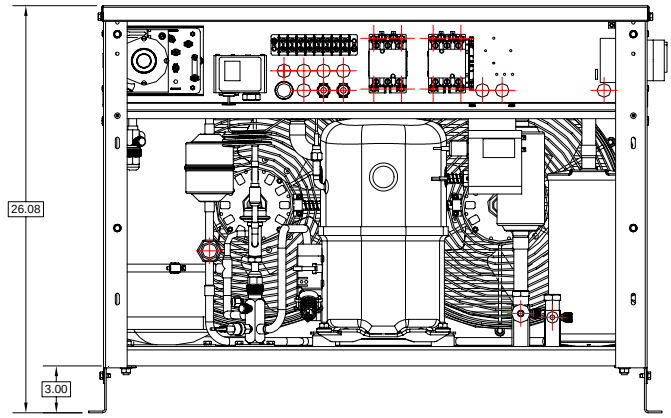
TECUMSEH HERMETIC CONDENSING UNIT

AVA4540EXNHN
TPC___rev 1
January 6, 2012

Model	**AVA4540EXNHN**
BOM	**32L3127-2E**
Air Cooled	**3 HP**
Application	**High Temp**
Refrigerant	**R 22**







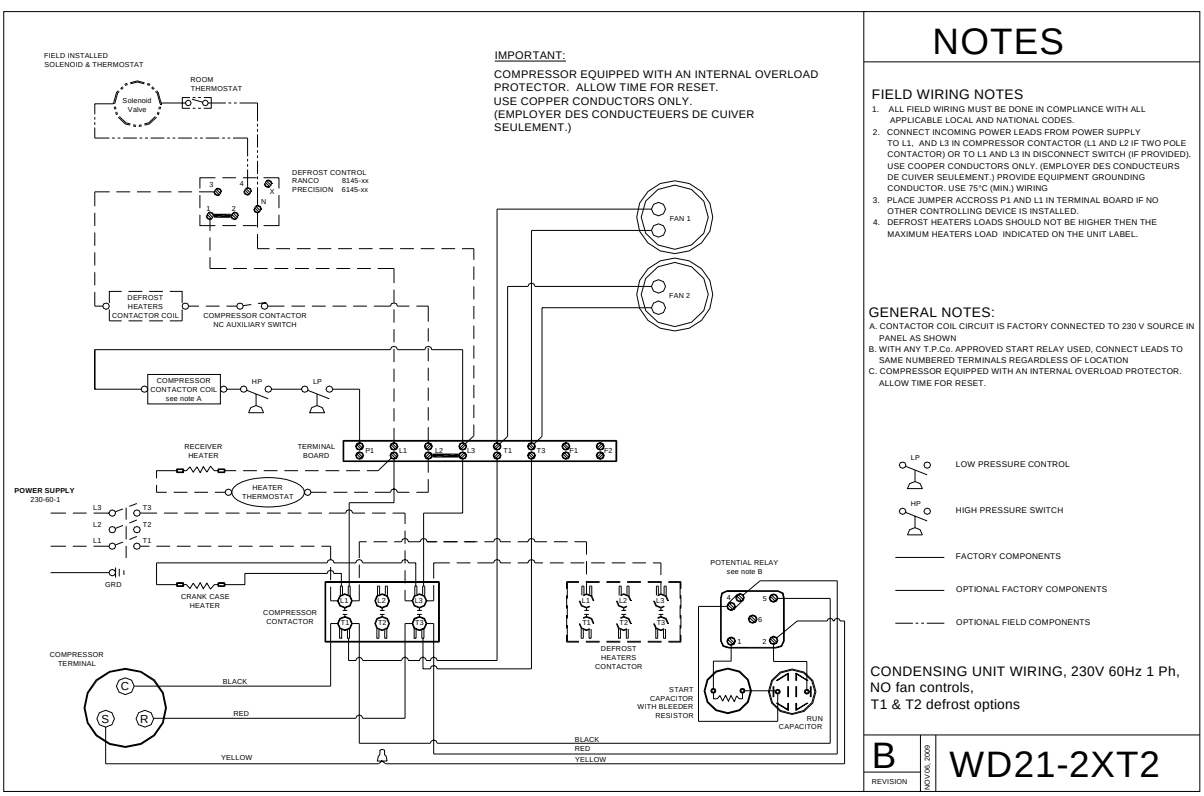
AVA4540EXNHN	Dimensions (inch)			Line connections		Pumpdown	Air flow	Oil Ch.	Gross weight
	L	W	H	Suction	Liquid	90% @ 90°F	SCFM	Oz.	Lbs.
	26.43	36.25	26.08	7/8 Sweat	1/2 Sweat	22.41	1550	55	280

Factory charge 20 psig dry air, **MUST BE EVACUATED**

Evaporator		Ambient Temeratures														
		80°F			90°F			95°F			100°F			110°F		
°F	Psig	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T
10	32.8	21400	2980	100	19600	3060	109	18400	3030	115	17300	3100	119	15500	3130	128
15	37.7	24200	3160	102	22200	3260	112	21000	3290	117	19800	3310	121	17900	3370	130
20	43.0	27100	3350	105	24900	3460	114	23600	3530	120	22400	3540	124	20400	3610	133
25	48.7	30000	3560	108	27600	3680	117	26300	3770	123	25000	3780	127	22800	3870	136
30	54.8	33000	3770	111	30500	3900	120	29000	4010	126	27700	4030	129	25300	4140	138
35	61.4	36100	4000	114	33400	4140	123	31800	4240	129	30400	4290	132	27800	4420	141
40	68.5	39300	4250	118	36300	4390	126	34700	4460	132	33100	4550	135	30400	4710	144
45	**76.0**	**42600**	**4500**	**121**	**39400**	**4650**	**129**	**37600**	**4670**	**135**	**35900**	**4830**	**138**	**32900**	**5020**	**147**
50	84.0	46000	4770	125	42500	4930	133	40600	4880	139	38800	5120	141	35500	5330	150
55	92.6	49400	5050	128	45700	5210	136	43600	5070	142	41700	5410	144	38100	5660	153

Parts/Specifications

STANDARD				OPTIONAL	
Unit BOM	**32L3127-2E**	Fan Motor	810F050C20	Defrost Clock (Tn option)	84110
Unit MODEL	**AVA4540EXNHN**	Fan Motor Qty	2	Defrost Heaters Contactor	91014
		Fan Motor RLA	0.7		
Refrigeration RANGE	(20°F to 55°F)	Fan Blade	51568	Rec. Heater (R option)	LHR-222
Design Pressure Low	150	Fan Guard	70831	Solenoid Valve (loose)	KSVC-264
Design Pressure High	450	Shroud	70648-2		
Volts - HZ - Ph	208-230V ~ 60HZ			Disconnect (D option)	LDSG-613
Voltage Range	187 - 253	High Pressure switch	84095-1L		
Min. Circuit Ampacity	28.05	Low Pressure Control	84026-D		
Max. Fuse Size	50	Dual Pressure Conrol			
Compressor MODEL	AVA5542EXN	Condenser	50858		
Compressor BOM	AV144ET-001-A2	Head Master Valve	70083-1	Wiring with A option	WD21-2AT2
Compressor LRA	108	Check Valve	56626	**BOM INDEX DESCRIPTION**	
Compressor RLA	21.15	Process Valve			
		Liquid Valve			
OverLoad	INTERNAL	Suction Valve	31529-1	**32xYYYY- 2ERA(F)TnDS**	
Relay	820ARR3H46			E Enclosure	
Run Capacitor	85PR440F28	Receiver	51099-2L	R Receiver Heater	
Run Capacitor Rating	40 MFD, 440 V	Receiver Qty	1	A Adjustable fan control	
Start Capacitor	85PS330D16	Accumulator	TK00042000	F Fixed fan Control	
Start Capacitor Rating	130-156 MFD, 330 V	Liquid Filter	52000-084D	T1 Defrost timer option	
Contactor	91014	Sight Glass	SG-08DF	T2 Defrost timer & Defrost Heaters Contactor	
		Suction Filter	70822-5S	D Disconnect	
Unit Drawing	DGU1920-L101			S Solenoid liquid Valve (supplied loose)	
Wiring Diagram	WD21-2XT2	CrankCase Heater	90699		



NOTES

FIELD WIRING NOTES

1. ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
2. CONNECT INCOMING POWER LEADS FROM POWER SUPPLY TO L1, AND L3 IN COMPRESSOR CONTACTOR (L1 AND L2 IF TWO POLE CONTACTOR) OR TO L1 AND L3 IN DISCONNECT SWITCH (IF PROVIDED). USE COOPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING
3. PLACE JUMPER ACCROSS P1 AND L1 IN TERMINAL BOARD IF NO OTHER CONTROLLING DEVICE IS INSTALLED.
4. DEFROST HEATERS LOADS SHOULD NOT BE HIGHER THEN THE MAXIMUM HEATERS LOAD INDICATED ON THE UNIT LABEL.

GENERAL NOTES:

A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V SOURCE IN PANEL AS SHOWN
B. WITH ANY T.P.Co. APPROVED START RELAY USED, CONNECT LEADS TO SAME NUMBERED TERMINALS REGARDLESS OF LOCATION
C. COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.

LP — LOW PRESSURE CONTROL
HP — HIGH PRESSURE SWITCH
FACTORY COMPONENTS
OPTIONAL FACTORY COMPONENTS
OPTIONAL FIELD COMPONENTS

CONDENSING UNIT WIRING, 230V 60Hz 1 Ph,
NO fan controls,
T1 & T2 defrost options

B REVISION NOV.06, 2009

WD21-2XT2